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TRANSCRIPT OF RECORD.

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1920

No. 85

LEWIS M. HAUPT, APPELLANT,

vs.

THE UNITED STATES.

APPEAL FROM THE COURT OF CLAIMS.

FILED MARCH 23, 1921.

(27,032)

(27,032)

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OCTOBER TERM, 1919.

No. 336.

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vs.

THE UNITED STATES.

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COURT OF CLAIMS.

No. 30,379.

LEWIS M. HAUPT

VS.

THE UNITED STATES.

I. Petition and Amended Petition.

On April 19, 1909, the claimant filed his original petition.

Subsequently, to wit, on October 27, 1911, the claimant, by leave of court, filed his amended petition, which is as follows:

Amended Petition.

To the Honorable Chief Justice and Judges of the Court of Claims:

Petitioner, by leave of court, files this his amended petition and says:

I.

Petitioner is a citizen of the United States and of the State of Pennsylvania.

II.

On the third day of April, 1886, and the twenty-sixth day of November, 1901, letters patent of the United States were issued to petitioner for a novel and useful system of dikes, jetties and breakwaters, and a method of constructing the same, all designed by him. The function of said device was and is to develop or deepen channels in rivers and harbors. The design was novel, chiefly in that
2 it proposed a curved jetty, by which the double service was to be performed of protecting the area of the intended channel from sediment and of causing such energy of currents as, by reaction along a concave directrix, to create and maintain the channel. All other designs on which jetties or breakwaters were under construction or provided for in rivers or harbors of the United States at the times of the issue of said patents and the other times herein-after stated called for two jetties, each much longer than the one jetty which would be required by petitioner's said plan at the same points respectively.

III.

Commencing in 1883, a number of attempts had been made by the United States Government and by private enterprises to secure a channel, navigable for ships of heavy draft, at Aransas Pass, Texas.

From 1880 to 1885 a part of one of two projected jetties was constructed in said harbor under an appropriation of Congress, which had been prompted by an estimate made by the Chief of Engineers of the Army that such two jetties could be constructed, to secure possibly 12 feet of water across an outer bar, at a cost of seven hundred fifty-nine thousand one hundred and eighty-five dollars (\$759,185). In such partial construction of one jetty and auxiliary work a total of five hundred and fifty thousand four hundred sixteen dollars (\$550,416) was expended prior to June 30, 1890, and the normal depth of the channel at that position was not increased. These results were reported by the engineer in charge. In 1887 the engineers of said corps made a new estimate, which was communicated to Congress, in which the cost of a channel twenty (20) feet deep across said bar was put at two million fifty-two thousand five hundred and forty-three dollars and seventy-two cents (\$2,052,543.72). No further appropriation was made and no more work was done on said jetties, and before 1890 such part of the one jetty as had been constructed was reported by the engineer in charge to have "disappeared;" but at that time said structure remained in said inlet channel, being a serious detriment, rather than an aid, to the deepening of the channel. The improvement of said harbor and of others on the Texas coast was and is difficult because of the frequency and violence of storms and the prevalence of trade winds, and it was because of this difficulty and the expected great cost of the project the construction of said jetties was abandoned by Congress.

IV.

Commencing in the year 1890 and continuing its efforts intermittently through the years following, including 1898, the Aransas Pass Harbor Company, a private corporation, organized under the laws of the State of Texas, attempted, under authority and franchises granted by an act of Congress approved May 12, 1890, to create in said harbor an adequate channel for all sea-going vessels. On the failure of other plans which said company had tried, petitioner authorized its board of directors, on the condition that the construction be completed in ten months from that time, to build a jetty in said harbor in accordance with his patent. Said company thereupon caused the necessary surveys to be made and awarded contracts for the partial construction of a curved breakwater conforming with petitioner's said design. The construction so contracted for was accomplished, but said old jetty, which was found to be still in place, extending across the channel at depths of from 8 to 13 feet, prevented scour to 15 feet by the natural force of the currents, and the funds of said company were then exhausted and it was not able to complete the breakwater so planned. After conferences and correspondence with officers of the Engineer Corps of the United States Army, the directors of said company then agreed, on condition that Congress would make the necessary appropriations, commencing at its next session, and the United States would com-

4 plete the breakwater on said plan, to reconvey to the United States all its rights and franchises in and about the harbor and the work which had been constructed on said breakwater, and a deed to that effect was executed by the president of said company, acting under a resolution of the directors, on the twenty-seventh day of March, 1899.

V.

Petitioner, in writing, when informed of said negotiations between the directors of said company and the said officers of the Corps of Engineers, reminded said directors that said company could not convey any right to the use of his patent and notified them that he would not consent to any such conveyance. Said directors did not assert that they could convey any right to the use of said patent, and said deed of said company to the United States did not include any such right or mention said patent; nor has said company attempted in any other way to assign its said license.

VI.

The act of Congress approved March 3, 1899, making appropriations for the improvement of rivers and harbors, contained a paragraph in the words and figures below:

"Improving Aransas Pass, Texas.—For dredging and other improvements of Aransas Harbor, \$60,000: Provided, That the Secretary of War is hereby authorized to contract for the removal of that portion of the old Government jetty in said harbor from the end nearest the curved jetty constructed by the Aransas Pass Harbor Company to the wreck, 'Mary,' in such manner as to in no wise interfere with the curved jetty now located in said harbor; and provided further, That said contract shall not be let by the Secretary of War, nor said work done, until the said Aransas Pass Harbor Company shall have properly released and surrendered all rights and privileges heretofore granted to it in said harbor by Congress, also the jetty constructed in said harbor."

5 Said appropriation was applied, not to the removal of said old jetty or any part thereof, but to some additional work on said curved jetty. Said old jetty was in part broken up by blasting five years later, to wit, in the year 1904, but the stones composing the same have never been entirely removed from the channel, and they have continued to be and are still a detriment to the development of the same.

VII.

At the first session of the 57th Congress petitioner appeared at hearings both of the House Committee on Rivers and Harbors and the Senate Committee on Commerce, and pointed out that, to the end that the completed jetty should scour the channel to the desired depth in the shortest time, a little dredging, involving an expenditure of probably less than ten thousand dollars (\$10,000)

would be necessary at points which he indicated; and he then offered, if said dredging were permitted and said old jetty removed without longer delay, to complete the jetty and construct all auxiliary works, applying his patented design, for five hundred thousand dollars (\$500,000) and not to claim any royalty or other compensation for this application of his said design; this under bonds forfeiting all compensation on his failing to secure the depth promised. He also notified the committee that if Congress should not provide for the performance of said work by himself, but his patent and design should be adopted and the work done by the Corps of Engineers, or some other contractor under the direction of the army engineers, or if said old jetty should not be removed, he would not waive or surrender his right to compensation for such use of the patented design. It became manifest that said committee favored the adoption by Congress of petitioner's design and the completion of the jetty in conformance therewith, and thereupon the Chief of Engineers through an assistant recommended that the appropriation contemplated for this purpose, like all those for other river and harbor improvements, be put in control of the Secretary of War and Chief of Engineers, to be applied to any contracts that they might award, whether to petitioner or other bidders, and promised that the Engineer Corps would cause the work to be done on said design in good faith. Consenting to this recommendation, the committee caused to be inserted in the pending appropriation bill for the improvement of rivers and harbors a paragraph in the words and figures below, and the same was a part of the bill as passed, the act being approved June 13, 1902:

"Improving Aransas Pass, Texas. Continuing improvement \$250,000. Provided, That the work at this harbor shall be confined to the completion of the north jetty in accordance with the design and specifications of the Aransas Pass Harbor Company and in continuation of the work heretofore carried out on said jetty by said company, and to such additional work as may be necessary for strengthening such jetty, and for the removal of such part of the old Government jetty and any other hard material which may interfere with the formation of a channel by the natural action of the current."

VIII.

The intention of Congress in making said appropriation and of the Corps of Engineers in using the same was that petitioner's said design should be strictly applied in the performance of the work. To this end Captain C. S. Riche, the District Engineer of the United States in charge at Galveston, Texas, when preparing specifications on which to invite bids for the work, consulted petitioner and adopted divers amendments which petitioner suggested and in the specifications as finally drawn said design was accurately incorporated. Bids were received under specifications so drawn and a contract was awarded to one Henry C. Ripley. Under said contract said Henry C. Ripley completed a considerable part of said jetty, his work terminating on September 17, 1904.

Such part of said curved jetty as remained to be constructed when said work of said Henry C. Ripley was completed was thereafter built under two appropriations of Congress. The first of said two appropriations was a clause, in the words and figures below, of the appropriation bill for the improvement of rivers and harbors approved March 3, 1905:

"Improving Aransas Pass, Texas.—Continuing improvement, \$100,000; Provided, That a contract or contracts may be entered into by the Secretary of War for such materials and work as may be necessary to prosecute said project, to be paid for as appropriations may from time to time be made by law, not to exceed in the aggregate \$100,000, exclusive of the amounts herein and heretofore appropriated; Provided further, That the amounts herein appropriated and authorized shall be applied to the completion of the project in accordance with the design and specifications of the Aransas Pass Harbor Company, and in continuation of the work heretofore done, and to such additional work as may be necessary for strengthening the jetty."

The second of said two appropriations, and the last required and made for the construction of said curved jetty, was made by a paragraph, in the words below, in the act of Congress approved June 30, 1906, making appropriations for sundry civil expenses of the Government.

"Improving Aransas Pass and Bay, Texas.—For continuing improvement of Aransas Pass in completion of contract authorization, \$100,000, to be applied to the construction of the project in accordance with the design and specifications of the Aransas Pass Harbor Company, and in continuation of the work heretofore done, and to such additional work as may be necessary for strengthening the jetty."

Said remaining work for which said two appropriations were made was done by Clark and Company, a partnership, under a single contract. Between the work done by said partnership and that which had been done by said Henry C. Ripley there was a gap of uncompleted work until in the spring of 1906, but at said time said gap was closed and the work was completed in June of the same year.

X.

The act of Congress approved March 2, 1907, making appropriations for river and harbor improvements, contained a paragraph in the words below:

"Improving Harbor at Aransas Pass, Texas.—Continuing the improvement in accordance with the plans submitted in its report of December twenty-second, nineteen hundred and six, by the Board of Engineers created by authority of section three of the River and

Harbor Act of June thirteenth, nineteen hundred and two, two hundred thousand dollars; Provided, That the Secretary of War may enter into a contract or contracts for such materials and work as may be necessary to prosecute said project, to be paid for as appropriations may from time to time be made by law, not to exceed in the aggregate two hundred and ninety thousand dollars, exclusive of the amounts herein and heretofore appropriated."

Said plans of the Board of Engineers referred to in said appropriation of March 2, 1907, provided for the maintenance of said curved jetty, which was described in all the legislation on the subject as the "north" jetty; for the construction of a second jetty south of and opposite said reaction jetty; for the probable extension of both jetties a distance of one thousand seven hundred and fifty (1,750) feet; for the construction of various auxiliary works and railroad trestles and tracks, and for a dredge, to create and maintain a channel.

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XI.

The act of Congress approved May 27, 1908, making appropriations for sundry civil expenses of the Government, contained a paragraph in the words below:

"Improving Aransas Pass and Bay, Texas.—For continuing the improvement, two hundred thousand dollars."

The act of Congress approved March 4, 1909, making appropriations for sundry civil expenses of the Government, contained a paragraph in the words below:

"Improving Aransas Pass and Bay, Texas.—For continuing the improvement in completion of contract authorization, ninety thousand dollars."

Under said appropriations of March 2, 1907, and May 27, 1908, contracts were awarded for the work planned by said Board of Engineers, and a considerable part of the south jetty so designed has been constructed.

XII.

The cost of said works designed by said Board of Engineers was estimated by the board at one million two hundred and eighty-eight thousand six hundred and ninety-nine dollars (\$1,288,699), with seventy-five thousand dollars (\$75,000) per annum additional for the maintenance of the channel. In the performance of the work contracted for under said appropriations of March 2, 1907, and May 27, 1908, the full sum of two hundred thousand dollars (\$200,000) has been expended, and in the continuation of the work, as now planned by the Corps of Engineers, the full sum of ninety thousand dollars (\$90,000), appropriated in said act of March 4, 1909, will necessarily be expended. The contracts awarded under said appro-

10 priations did not provide for, and no work has ever been done, said extensions of the jetties included in said design of the Board of Engineers as probable. The cost of said extensions would

be not less than one million three hundred thousand dollars (\$1,300,000).

XIII.

Even before said work of said Henry C. Ripley was completed said north jetty was deepening and widening the channel in said harbor and it continued to deepen and widen the same throughout said operations of said Henry C. Ripley and of Clark and Company. Said good results were much increased when said gap was closed by Clark and Company and the work completed. The effect of said jetty to this time has been constantly to deepen and widen the channel, but said good results have been counteracted in some measure by the influence of that portion of the south jetty which was constructed under said appropriation of March 2, 1907, and they have subsequently been counteracted in a greater degree by the influence of the larger construction completed on said jetty under said appropriation of May 27, 1908. Said results have also been and still are retarded in some degree by the remains of the old jetty, constructed before the adoption of petitioner's design, which has never been fully removed.

XIV.

Said patented design of petitioner had never been applied and has not yet been applied anywhere else but in said Aransas Pass harbor, and its value has depended on a clear demonstration in said harbor of its utility. Congress was apprised of these facts when said appropriations were made, and the officers of the Corps of Engineers having authority in the premises were apprised of the same when said appropriations were utilized. By said operation of said south jetty the utility of petitioner's said design has been obscured and made subject to doubt and question, and thereby its value has been and is impaired to the amount of five hundred thousand dollars (\$500,000).

XV.

The construction called for in said plan of the Board of Engineers created by said act of Congress approved June 13, 1902 (following on and distinct from the construction already done by said Henry C. Ripley and said Clark and Company) will necessarily cost in the aggregate not less than one million seven hundred and fifty thousand dollars (\$1,750,000). Petitioner says that in so far as such construction has been accomplished it is a detriment, not an aid, to the development of the channel by said north jetty; that the structures specified by said board can never, in any event, accomplish the results for which petitioner's said design was adopted by Congress and which so far as it has had opportunity, it has accomplished, but that if such results can be accomplished by said plan of said board, constant dredging will be required to create and maintain the channel so sought, and that such dredging will cost forever, so long as such effort to maintain the channel is continued, not less than sixty thousand dollars (\$60,000) a year. Petitioner says further that, under the

offer made by himself to the 57th Congress, said north jetty would have been completed at a cost to the United States of five hundred thousand dollars (\$500,000), and he says that said jetty alone would have created and maintained the channel which was the object of said appropriations by the 57th Congress and later Congresses.

Petitioner prays judgment against the United States in the sum of one million seven hundred and fifty thousand dollars (\$1,750,000), the same being the aggregate of the sums of (1) one million 12 two hundred and fifty thousand dollars (\$1,250,000), due to him for the use of his said patented design recited in paragraphs VII to XIII, inclusive, and (2) five hundred thousand dollars (\$500,000) due to him for the impairment of the value of said patent recited in paragraph XIV hereof.

BENJ. CARTER,
Attorney for Claimant.

DISTRICT OF COLUMBIA, ss:

Before me, Francis L. Neubeck, a notary public in and for said District, Benj. Carter, whose name is written as a part of the signature to the foregoing petition, made oath on this 26th day of October, 1911, that the allegations of said petition are true to the best of his knowledge, information, and belief.

BENJ. CARTER,

Subscribed and sworn to before me the day above written.
FRANCIS L. NEUBECK,
Notary Public.

II. *General Traverse.*

No. 30379.

LEWIS M. HAUPT

VS.

THE UNITED STATES.

No demurrer, plea, answer, counterclaim, set-off, claim of damages, demand, or defense in the premises, having been entered on the part of the defendants, a general traverse is entered as provided by Rule 34.

13 III. *History of Proceedings.*

On May 22, 1917, the case was argued and submitted on merits by Messrs. P. M. Ashford, George W. Ramsey and Benjamin Carter, for the claimant, and by Messrs. W. D. Eakin and H. C. Workman, for the defendants.

On June 24, 1917, the court filed findings of fact and conclusion of law dismissing the petition and entered judgment against claimant in the sum of \$760.39 for the cost of printing the record in this court. Opinion Per Curiam.

On August 13, 1917, the claimant filed a motion for a new trial and for amendment of findings of fact.

On September 20, 1917, the defendants filed a motion to strike out claimant's motion for new trial and amendment of findings of fact.

On October 15, 1917, the claimant was allowed to withdraw former motion (filed August 13, 1917) and granted leave to file amended motion and given 10 days to file brief in support.

On October 15, 1917, the claimant filed an amended motion for a new trial and for amendment of findings of fact.

On October 26, 1917, claimant filed a motion for extension of time to file brief, which motion was allowed by the court October 27, 1917, and time extended to and including November 1, 1917.

On October 31, 1917, the defendants were allowed (in open court) to file motion to amend findings of fact. Said motion to be filed within 10 days from this date.

On November 10, 1917, the defendants filed a motion for amendment of findings.

On November 19, 1917, the court ordered the claimant's and defendants' motions to the Law Calendar and set same for hearing.

IV. *Argument and Submission of Motions.*

On April 2, 1918, the claimant's motion to amend findings and the defendants' motion to amend findings were argued and submitted by Messrs. Benjamin Carter and G. W. Ramsey, for the claimant, and by Mr. W. D. Eakin, for the defendants.

14 V. *Ruling of Court on Motions to Amend Findings.*

On June 17, 1918, the court allowed in part and overruled in part the claimant's and defendants' motions for amendment of findings of fact. Former findings of fact, conclusion of law and opinion were withdrawn and new findings of fact, conclusion of law and opinion were this day filed which are as follows:

15 VI. *Findings of Fact, Conclusion of Law, and Opinion of the Court by Booth, J.*

Entered June 17, 1918.

This case having been heard by the Court of Claims the court, upon the evidence, makes the following:

Findings of Fact.

I.

The plaintiff, Lewis M. Haupt, is a citizen of the United States and a resident of the city of Philadelphia, Pa. He was graduated from West Point Military Academy in 1867, as a member of the Corps of Engineers, and served in the United States Army for about

two years; since which time he has been connected with the United States Patent Office as an assistant examiner, has been professor of civil engineering in the University of Pennsylvania, and for more than 40 years past has been engaged in practice as a consulting and civil engineer, and has made a special study of the subject of the improvement of harbors and navigable rivers.

11.

On December 13, 1887, the plaintiff filed in the United States Patent Office an application for letters patent for certain alleged improvements in dikes and breakwaters; and on April 3, 1888, United States Letters Patent No. 380,569 were granted him upon said application. A copy of said patent is set forth in the appendix to these findings of fact.

The claims of said application, as originally filed, were as follows:

"1. A breakwater or dike composed of a combination of curves, or of curves and right lines, so arranged as to resist and decompose the flood resultant over a portion of the outer bar, and at the same time to permit the free ingress of the tidal prism to the inner basin, substantially as described.

"2. The breakwater herein described having one end angularly approaching, but disconnected from the shore, to produce a reaction and compression upon that part of the flood intended to scour out and maintain the beach channel, substantially as set forth.

16 "3. A breakwater comprising one or more curves having their cusps or salients placed so as to cut the advancing waves and resolve them into components along the concave faces of the structure, substantially as described.

"4. A breakwater for improving the channels of rivers and harbors, said breakwater consisting of one or more semiellipses having at the shore end a straight or approximately straight flank, substantially as described.

"5. A dike for improving channels, composed of compound or reverse curves disposed to withdraw a part of the current from one channel and divert it into another, substantially as described.

"6. A reaction dike composed of compound or reverse curves, disconnected from the main shore lines and so disposed as to divert part of the current force from one channel into another, substantially as described.

"7. The combination of the breakwater composed of a series of intersecting arcs and a straight or slightly curved flank, and the dike composed of compound or reverse curves for conserving the energy of the inner forces, substantially as described."

On February 11, 1888, action was taken by the Patent Office on said application and claims, by letter to the applicant, as follows:

"This case has been examined. In regard to the 1st claim, 'combination of curves or curves and right lines,' apparently renders the claim alternative; there is also an uncertainty as to the meaning of said phrase. Does it mean on the one hand a combination of curves B, B' & B², or on the other hand a combination of the curves B, B', B², & F (B² F' being described in specification as sometimes slightly curved) or of curves and right lines B, B', B² F'? This uncertainty should be cleared up. The second claim appears to be substantially met by works of Douglas Harbor, A Treatise on Harbors by 'Rennie,' Vol. II, page 185, a copy of which can be found in the Congressional Library; see also 2nd paragraph, page 77, Harbors & Docks-Harbors-Pat. Office Library. Claims 5 & 6 are met in Reports of Chief Engineer, Part II, of 1877, sheet of drawings following page 1034 Buena-Vista Bar, Part I of 1878, page 796, Part I of 1885, page 696, Dyke on Bear Island, and Part I of 1876, page 719, sheets of drawings Nos. 9, 11, 13, 14, & 19, Improvements of the Tennessee River."

The Patent Office citations above against claims 5 and 6 showed dikes composed of compound or reverse curves and disposed as specified in said claims.

In response to said action of the Patent Office the applicant, on February 25, 1888, amended by introducing, as a new claim, claim 2 of the patent, and by amending claims 1, 2, 3, 4, 5, 6, and 7 of the application to number and read, respectively, as claims 1, 3, 4, 5, 6, 7, and 8 of the patent as granted.

In response to these amendments of the applicant, the Patent Office on March 10, 1888, took action as follows:

"Case has been reconsidered in connection with amendment of Feb. 25. The 1st & 2nd claims differ from each other only in that the 1st calls for a breakwater formed of a combination of curves, the other with combination of curves and right lines. This renders the two alternative in form at least. The claims should not be dependent on reference to the specification to avoid that objection. If it is in the 1st claim to cover the series of intersecting curves not including the flank which approaches the shore would not the claim read better as follows after water level (having the form of a series of intersecting arcs having their cusps or salients so placed as to cut the advancing waves (see page 5 line 6 & 7), and to resist and decompose the flood resultant, &c.). If it is intended to include the flanks approaching the shore, then the 1st & 2nd claims are actually alternative. The remaining claims, as far as at present advised, are in condition for allowance."

On March 13, 1888, the applicant responded to the above action of the Patent Office as follows:

"The official letter of the 10th inst. has been received. It is thought that there is no conflict between claims 1 and 2, and that they do not exclude each other, as suggested. Claim 1 is designed to be sufficiently comprehensive in scope to cover the improved break-

water composed of a series of curves, whether or not the reaction flank is employed as an adjunct. Claim 2 includes such flank in terms. Claim 1 is therefore generic, and claim 2 specific. A reconsideration is requested."

The claims as theretofore amended were thereupon allowed by the Patent Office, and the patent duly issued.

Said letters patent expired by limitation April 3, 1907. By his deed of June 7, 1902, recorded in the Patent Office June 9, 1902, plaintiff assigned said patent to the Reaction Jetty Company, excepting only his "right, title, and interest in and to the work already done or to be done at Aransas Pass, in the State of Texas." The patent was not reassigned to him.

III.

Aransas Pass is an inlet connecting the waters of the Gulf of Mexico proper and those of Aransas Bay and the Bay of Corpus Christi on the coast of Texas. As early as 1854 the subject of developing a channel in said Pass sufficient to permit navigation was agitated. From 1854 to 1880 little or no work was done toward that end. In 1869 a private company built a short hurdle about 600 feet long, extending from the north shore of the Pass, which produced a temporary deepening of the channel in the Pass of about 2 feet. By 1871, however, this work had apparently disappeared, for an examination made about that time by Lieut. Woodruff, of the Engineer Corps of the United States Army, found no trace of it. Nothing more was done until about 1880, between which time and 1885 there was constructed by the Federal Government, aided by a small subscription made by the citizens of Rockport and Corpus Christi, about 5,500 feet of jetty, of which 1,500 feet was on shore. This was known as the "Mansfield" jetty. It had no appreciable effect upon the channel, and by 1888 the curved portion of the jetty had practically disappeared.

18 Maj. Ernst, who succeeded Maj. Mansfield as United States engineer for said district, recommended an appropriation of something over \$2,000,000 for the construction of two jetties 2,000 feet apart. Work was continued under appropriation made by Congress, on the "two-jetties" plan, by extending the so-called Mansfield jetty from a point beginning near the "wreck Mary", and running out to sea on a curved line. After about \$550,000 had been expended on this project work was suspended in 1889 on account of the adoption by Congress of a proposition submitted by a special board on the subject of Texas inlets, which recommended the suspension of all projects for improvement of the harbors on the Texas coast except that at Galveston.

IV.

On March 22, 1890, the State of Texas chartered the Aransas Pass Harbor Co., a private corporation organized for the purpose, among other things, of improving the channel at Aransas Pass.

By an act passed May 12, 1890, 26 Stats., 105, Congress granted to the said Aransas Pass Harbor Co., a franchise to open Aransas Pass on the coast of that State to a depth of 20 feet. Said act is as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Aransas Pass Harbor Company, a corporation duly chartered under the laws of the State of Texas, and their associates, assigns, successors, and representatives be, and they are hereby, authorized on the conditions hereinafter mentioned, to construct, own, and operate such permanent and sufficient jetties and breakwaters and such auxiliary works as are necessary to create and permanently maintain, as hereinafter set forth, a navigable channel across the outer bar, which obstructs the entrance to Aransas Pass Harbor, on the coast of the Gulf of Mexico, in the State of Texas, and so far into the bays and navigable waters as may be necessary to reach a place that will afford ample dockage and protection from storms, swells, cyclones, and tidal waves for the purpose of furnishing the vessels and boats adapted to the purpose, facilities for navigation in and along the entire length of said channel, and for that purpose they may construct in the Gulf of Mexico and in and across the bays and navigable waters adjacent thereto such walls, jetties, dikes, levees, and other structures, and employ such boats, rafts, bridges, and appliances, as they may in the prosecution of said work deem necessary: Provided, That no such structure or means employed shall hinder, delay, or interfere with the free navigation in said channel, harbor, bays, or navigable waters; and to protect their said works they may build and maintain such levees, embankments, walls, or riprap as may be necessary to secure their permanency along the banks or shores of Mustang, Saint Joseph, and Harbor Islands as the United States is authorized to grant, and to utilize such works as the Government has already constructed, and will hold the United States harmless from any damage that may accrue to any person or persons by the construction of said walls, jetties, dikes, levees, and other works constructed thereunder: Provided further, That unless the construction of the proposed work shall be commenced within one year from the date of the approval of this act and be diligently prosecuted by the expenditure of at least \$300,000 per annum thereafter in the prosecution thereof until twenty feet depth of water over the outer bar is obtained, the grant of privileges herein shall be forfeited; and unless the said company, their associates, assigns, successors, or legal representatives, shall secure a navigable depth over said outer bar of fifteen feet of water within three years after the date of the approval of this act, and a navigable depth of twenty feet of water over said bar within five years from said date, then Congress may revoke the privileges herein granted in relation to said improvements.

"Sec. 2. That at any time after said improvements and auxiliary works have been completed as herein provided, and said depth of twenty feet has been obtained, the United States shall have the right

to pay the said company, or their assigns, successors, or legal representatives, the value of the works constructed under this act or under or by virtue of any authority granted by the State of Texas, and on such payment being made by the United States all rights to said work on the part of said parties shall cease, but nothing in this act shall be construed as compelling the Government to take possession of and pay for said works unless so desired. Nothing within the provisions of this act shall be construed as authorizing the said company to charge or collect tolls or tonnage upon boats or vessels navigating said channel and the navigation of the same shall be free."

Said company began work on March 2, 1892, on a jetty known as the "Nelson Jetty," composed of wooden caissons, filled with sand, built out from Mustang Island for a distance of about 1,800 feet. It failed to deepen the channel and was abandoned about August 1, 1893, after about \$107,000 had been expended on it. It was later destroyed by action of the waves of the sea.

Upon a failure of the harbor company to meet certain requirements of said act Congress, on January 22, 1894, 28 Stat., 26, passed an act as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Aransas Pass Harbor Company, which is engaged in the improvement of Aransas Pass under the provisions contained in an act of Congress entitled 'An act for the improvement of Aransas Pass,' approved May twelfth, eighteen hundred and ninety, is hereby relieved from the conditions of said act which require the construction of said work to be commenced within one year from the date of its approval and to be diligently prosecuted by the expenditure of at least \$200,000 per annum thereafter, and to secure a navigable depth over the outer bar of fifteen feet of water within three years after the date of approval of said act, and of twenty feet within five years from said date; and the said company is hereby authorized to continue and complete its work of improvement as set forth in said act: Provide, That work shall be resumed by the said Aransas Pass Harbor Company within six months from the date of approval of this act, and shall be diligently prosecuted to completion, and said company shall secure a navigable depth over the outer bar of at least twenty feet of water within two years from the date of approval of this act. And in the event of said company failing to resume said work within the said six months, or failing to diligently prosecute the same, or to secure a navigable depth of twenty feet of water over the outer bar within the time required by this act, then Congress may revoke the privileges herein granted in relation to said improvement.

"Sec. 2. That the right of Congress to alter, amend, or repeal this act is hereby reserved."

V.

After the building of said unsuccessful jetty, which was later destroyed, said harbor company was reorganized under the same name,

Plaintiff granted to the new company the privilege of using his patented device on condition that the work be done under his supervision. Said new company proceeded under the said act of January 22, 1894. Plaintiff prepared the plans and drawings. Said company looked upon the plan of work as in the nature of an experiment and was unwilling and financially unable to expend any more than was absolutely necessary to make a demonstration of the plan. They therefore concluded that they would build only about one-half of the designed breakwater to determine its utility. Thereupon the company called upon plaintiff to eliminate part of his specification and he did eliminate a portion, though he considered that it would be a detriment to his plan to do so. The estimated cost was cut in half before the company would consent to start the work. Included in the portion eliminated was the "flank" hereafter mentioned. On July 3, 1895, said company contracted with Charles Clarke & Co., of Galveston, for the construction by the latter of a single curved jetty in accordance with the modified plans, drawings, and specifications prepared and furnished by the claimant, as above stated, and to be located on the site selected by him. The plaintiff had recommended a dike in the form of a compound or reverse curve, with a slightly curved flank at the in-shore end, which left the main jetty at an angle and ran nearly parallel with the then shore of St. Joseph Island at a distance of several hundred feet from it. The purpose of said flank, according to plaintiff's plan, was to prevent cross currents and to concentrate the flood tide as it entered, and also to control more fully the ebb currents and direct them tangentially against the concave portion of the jetty, and thus increase their scouring efficiency. It was an important element in the plan as designed by claimant and was included in the portion eliminated by him, as above stated. It was never built. As hereafter shown, the space between the inner end of the jetty and the shore was subsequently closed.

When the new Aransas Pass company was organized, it was agreed that the plaintiff and another engineer should each receive \$1,000, of which \$500 was to be payable to each on obtaining 15 feet in depth and the balance on obtaining 20 feet in depth of the channel, and that was to be the entire consideration for the work of claimant. The company was not to pay anything for the use of the patent or for preparing the plans. No time limit was stated, and payment was contingent upon said results. The plaintiff did not expect anything in the way of compensation from the company for the use of the patent; his desire was to obtain the benefit of an early demonstration of the same. The plaintiff received only one of said \$500 payments, and that was made by the Aransas Pass Harbor Co. after its conveyance of the work to the Government had been made, as hereafter mentioned, in 1899.

21 The work of construction under the Clarke & Co. contract was vigorously prosecuted until January 22, 1896.

VI.

During or shortly after the work done by Clarke & Co., it was discovered that the Mansfield Jetty, which extended out from Mustang Island, had not disappeared, as officially reported, to sufficient depth to permit free erosion by the currents, the said jetty acting as a "sill" across the proposed channel. A contract was therefore entered into by and between said harbor company and Col. C. P. Goodyear about the 1st of September 1896, for the removal, by blasting, of a small part of the obstructing Mansfield Jetty and for the completion of the breakwater begun by Clarke & Co.

In May following, to wit, 1897, before either of the said objects had been accomplished, work was suspended under the Goodyear contract.

VII.

On May 28, 1898, the Senate concurred in a resolution adopted by the House of Representatives May 26, 1898, providing as follows:

"That the Secretary of War be, and he is hereby, authorized and directed to prepare and submit plans, specifications, and estimates for the improvement of Aransas Pass Harbor, State of Texas, and especially to make plans and estimates for the removal of the sand bar at Aransas Pass and the deepening of the channel across said bar to a depth of at least twenty feet and a width of at least one hundred and fifty feet at the bottom, so as to furnish an inlet for the passage of vessels from the Gulf of Mexico into Aransas Harbor; and report such plans to Congress and also whether in his judgment such improvement should be made."

A board was created by the War Department to act in accordance with said resolution. It reported on December 30, 1898, that it would be advisable to build two parallel jetties and to have recourse to dredging; that the north jetty be located essentially upon the line of the jetty partially constructed by the Aransas Pass Harbor Co., and the south jetty be constructed about 1,200 feet south thereof; that a portion of the old Government Jetty and outer 1,000 feet of foundation of the Aransas Pass Harbor Co.'s Jetty should be removed in any case. The board estimated making the bottom width 300 feet. In the meantime the plaintiff had brought to the attention of different members of Congress his plan, and when the report of said board was submitted and its recommendations were before the House Committee on Rivers and Harbors early in 1899 the plaintiff was requested by the chairman, Hon. Theodore E. Burton, to submit his proposition relative to said improvement. Plaintiff submitted a proposition to the committee to complete the work at Aransas Pass by creating a 20-foot channel 100 feet wide for \$700,000, which was greatly less than the amount estimated by said board to be necessary for the work recommended by them. The plaintiff offered to make a bond for the successful completion of the work. A subcommittee was appointed to consider his proposition, and the same was put in

writing, accompanied by a bond. About that time a proposition was received by the subcommittee from the War Department proposing to secure a channel by dredging alone at a cost of \$100,000 without any guaranty as to the maintenance of the channel. The committee rejected plaintiff's offer and subsequently invited him to a meeting, and assured him that they were desirous of giving his plan a trial and were disposed to recommend an appropriation for the removal of the old Mansfield Jetty, which plaintiff claimed furnished an obstruction to the operation of his curved jetty. He was asked to make an estimate as to the cost of the removal of the Mansfield Jetty, and he placed the price at \$50,000.

VIII.

By the act making appropriations for rivers and harbors approved March 3, 1899, 30 Stats., 1121, 1128, \$60,000 was appropriated for dredging and improving Aransas Pass Harbor under the following conditions:

"Provided, That the Secretary of War is hereby authorized to contract for the removal of that portion of the old Government jetty in said harbor from the end nearest the curved jetty, constructed by the Aransas Pass Harbor Company, to the wreck Mary, in such manner as to in no wise interfere with the curved jetty now located in said harbor: And provided further, That said work shall not be let by the Secretary of War nor said work done until the said Aransas Pass Harbor Company shall have properly released and surrendered all rights and privileges heretofore granted to it in said harbor by Congress, also the jetty constructed in said harbor."

Said appropriation was not expended for the purpose of removing the old Mansfield Jetty and was chiefly used in 1901 and 1902 to build up the inner portion of the jetty in a manner that was considered harmful by plaintiff and not in accordance with his recommendation.

Prior to the passage of said appropriation bill of 1899 the board of directors of the Aransas Pass Harbor Co., on the 16th day of December, 1898, passed the following resolution:

"Be it resolved, That the Aransas Pass Harbor Company hereby releases to the United States Government all its rights and franchises received from said Government to secure deep water at Aransas Pass, Texas; and be it

"Further resolved, That said company convey to the United States Government the stone breakwater which it has constructed at said pass of Aransas in its efforts to secure deep water, provided that the United States Government take control of the improvement at Aransas Pass and make an appropriation at this session of Congress to prosecute the work in securing water across the bar at said Aransas Pass."

Said resolution was, on the 2d day of January, 1899, brought be-

fore a meeting of the stockholders of said harbor company, and they ratified and approved the said resolution of the directors. They authorized the president of the company to make conveyance of the franchises and property described in said resolution to the United States Government in accordance with said resolution, provided that the United States Government take control of the improvements at Aransas Pass "and make an appropriation at this session of Congress to prosecute the work in securing deep water across the bar at said Aransas Pass."

23. After the passage of said resolutions of the directors and stockholders and after the said act of March 3, 1859, a conveyance was made by the said Aransas Pass Harbor Co. to the United States reciting the said resolutions of the board of directors and stockholders, and further reciting that by provision in the said act of March 3, 1859, the Government of the United States had taken control of the improvement at said Aransas Pass and made an appropriation to prosecute the same with a view of securing deep water across the bar at said pass, and that in consideration thereof and other good and valuable considerations the said Aransas Pass Harbor Co. granted, conveyed, released and surrendered unto the United States of America all the rights, franchises, and privileges in the said harbor at said Aransas Pass theretofore granted to said company by Congress, together with the jetty constructed in said harbor and the stone breakwater erected by said company at said pass. Said conveyance was executed on the 27th day of March, 1859.

When plaintiff got information of the intention of the harbor company to turn everything over to the Government he addressed a letter to the Aransas Pass Harbor Co. in 1859 warning them against transferring his patent rights. Later in 1901, plaintiff wrote a letter to Charles Clarke & Co. notifying them that the plan of work adopted by said harbor company was patented, and requested them to take that into consideration in their bid. To this letter they replied that they had made no allowance in their bid for any patented rights and that their contract merely called for repairing the Aransas Pass breakwater. He also wrote to the chairman of the Committee on Rivers and Harbors of the House and the Senate that the right to use the plans, specifications, and designs furnished by him to said company was a personal one granted by him to said company and was not subject to transfer to the United States by it.

On the 7th day of June, 1902, the plaintiff duly assigned by an instrument in writing recorded in the Patent Office to the Reaction Jetty Co. all of its right, title, and interest in and to Letters Patent No. 380,569, bearing date April 3, 1888, and Letters Patent No. 687,307, bearing date November 26, 1901, excepting only his right, title, and interest in and to the work already done or to be done at the Aransas Pass, in the State of Texas, under these patents."

IX.

By the act making appropriations for rivers and harbors approved June 13, 1902, 32 Stats., 331, 340, \$250,000 was appropriated for

continuing the improvement at Aransas Pass under the following conditions:

"Provided, That the work at this harbor shall be confined to the completion of the north jetty in accordance with the design and specifications of the Aransas Pass Harbor Company, and in continuation of the work heretofore carried out on said jetty by said company, and to such additional work as may be necessary for strengthening such jetty, and for the removal of such part of the old Government jetty and any other hard material which may interfere with the formation of a channel by the natural action of the currents."

21 While the bill for said act was under consideration in the committee the plaintiff appeared before the House committee and renewed his proposition to complete the work and guarantee a channel, stating that in view of the work done by Clarke & Co. he would do the work for \$500,000. The House committee did not accede to his proposition, and he renewed it before the Senate committee having the bill in charge. Brig. Gen. McKenzie, Assistant Chief of Engineers of the Army, also appeared before the Senate committee and urged that a contract be not made directly with any contractor, but stated to the committee that if it were desirous to test the Haupt plan the War Department would be glad to see that a fair trial was given to it.

When making his proposition to complete the work for \$500,000 plaintiff stated to the committee that if he were given the contract he would charge no royalty and expect no compensation for the use of his patent, but that otherwise he would expect something for the work of development and the use of the patent. At that time plaintiff was promoting and offering for sale the stock of the corporation to which his letters patent had been assigned, as above stated. He desired that a demonstration of his patent be made.

X.

On April 20, 1903, a contract was entered into between the United States and one Henry C. Ripley for construction work on said jetty. The plans, drawings, and specifications for the work had been prepared by the Government engineer in charge and were by him submitted to the Aransas Pass Harbor Co. and to their consulting engineers, one of whom was plaintiff. The latter suggested amendments to the specifications, which were later adopted. The specifications attached to the Ripley contract conformed substantially to the plans, drawings, and specifications which had been prepared by plaintiff for said harbor company and used by it (with the exception of the modifications stated in Finding V. Said contract with Ripley contained a clause by which he agreed to indemnify the United States against any claim for the use of any patented invention. After the completion of this contract there were about 1,000 linear feet of the middle portion of the said jetty which had not been brought to the

same height as the end portions were, and some of the 1,000 feet were below low water. The plaintiff gave Ripley financial backing under an agreement that it should be repaired.

About the same time that the contract with Ripley was made a contract was entered into between the United States and Moore & Seiber for the removal of certain portions of the said Mansfield Jetty, and about 800 feet of the same were removed by them to a depth of 25 feet. There yet remained on the site of the Mansfield Jetty some loose rock.

XI.

By the act making appropriations for rivers and harbors approved March 3, 1905, 33 Stats., 1117, 1130, Congress appropriated \$100,000 for continuing the improvement at Aransas Pass and authorized contracts to be entered into for an additional sum, not to exceed \$100,000, thereafter upon the following conditions:

"That the amounts herein appropriated and authorized shall be applied to the completion of the project in accordance with the design and specifications of the Aransas Pass Harbor Company and in continuation of the work heretofore done, and to such additional work as may be necessary for strengthening the jetty."

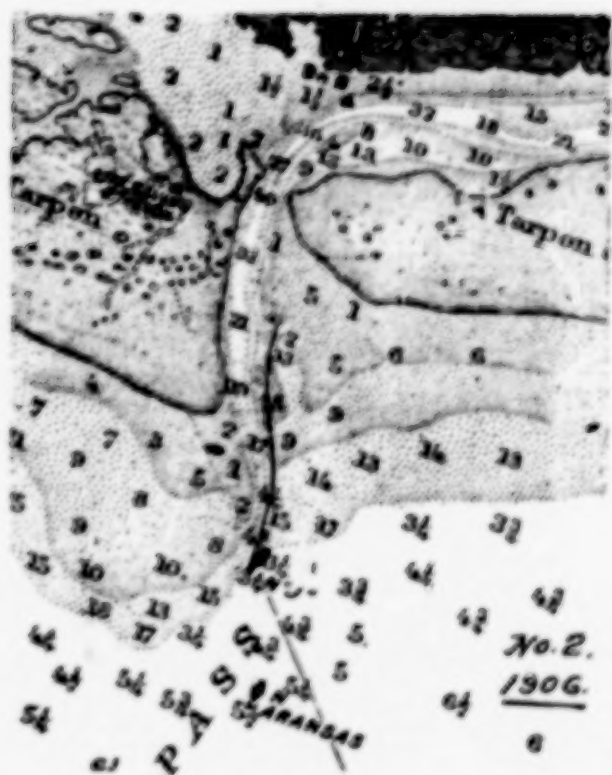
XII.

A contract was thereupon duly entered into by the United States with Clarke & Co. for the continuation of the work of constructing a curved jetty in accordance with the design and specifications which had been prepared for the Ripley contract. Later, to wit, June 30, 1906, Congress appropriated the \$100,000 authorized in the act of March 3, 1905 for the continuation of the improvement of Aransas Pass, with the condition attached to said appropriation that it was "to be applied to the construction of the project in accordance with the design and specifications of the Aransas Pass Harbor Company, and in continuation of the work heretofore done, and to such additional work as may be necessary for strengthening the jetty." 34 Stats., 737.

Under contracts in compliance with the provisions of said acts Clarke & Co. continued the work of said improvement, which was completed by the end of March, 1906, making the total length of the jetty 5,750 feet.

XIII.

In December, 1906, a board appointed by the War Department to further consider the Aransas Pass project recommended that the inlet between the so-called Haupt Jetty and St. Josephs Island be closed up and that a parallel jetty be built along the south side of said jetty, making the project one of twin jetties.



XIV.

By the act making appropriations for rivers and harbors approved March 2, 1907, 34 Stats., 1073, 1091, Congress appropriated \$200,000 and authorized contracts to be entered into for an additional amount of \$290,000 for improving the harbor at Aransas Pass upon the following conditions:

"Continuing improvement in accordance with the plans submitted in its report of December twenty-second, nineteen hundred and six, by the Board of Engineers, created by authority of section 3 of the Rivers and Harbors Act of June thirteenth, nineteen hundred and two."

Carrying out the purpose of said act of March 2, 1907, contracts were made by the proper officers of the War Department with sundry individuals under which the gap between the inner end of the jetty and the shore was closed. The structure which served to close said gap extended from the said jetty at a point about where the flank originally designed by claimant was to start. Said inner gap was closed between July, 1908, and February 27, 1909. Under the contracts made under the act of March 2, 1907, a jetty generally parallel to the so-called Haupt Jetty was built out from Mustang Island into the sea, a distance of some hundreds of feet farther than the outer end of said Haupt Jetty. The said south jetty was begun
26 in March, 1908, and completed in April, 1911. There was no contract with reference to any changes in the said curved jetty. In the years 1914 and 1915, under a revised plan of the Army engineers adopted in 1913, the south jetty has been built farther out.

XV.

The plan of jetty begun by the said harbor company in 1895 and the construction work thereon by said company, and subsequently by the United States until its completion in March, 1906, prior to the change of the plan to twin jetties, were in accordance with the modified plan and specifications furnished said company by the plaintiff and approved by the company, as aforesaid, which plan omitted the flank originally included in the claimant's plan as shown by Finding V.

The location and shape of said jetty as actually constructed is shown by the following cut, the general course of the jetty being southeasterly from the inshore end thereof:

(Here follows drawing marked page 26.)

Said jetty, as so constructed, did not embody any of the devices of the plaintiff's said Letters Patent No. 380569.

The twin jetties plan adopted and carried out by the United States, as set forth in Finding XIV, is shown by the following illustration, of date 1912, in which the southeasterly point of St. Joseph Island, as compared with its position in the illustration in Finding XV, has been extended by sand drift or fill out to near the point of the inner end of the said harbor company reverse curve jetty.

(Here follows drawing marked page 27.)



XVII.

At the time of the filing of the plaintiff's said application for patent there were in the art to which said application related curved dikes or breakwaters concave to the current, and compound or reverse curve dikes or breakwaters of the general character and form of the said dike or jetty constructed by said Aransas Pass Harbor Company and the United States as set forth in Finding XV above.

Among the disclosures of the prior art there were, in addition to those cited by the Patent Office against original claims 5 and 6 of the plaintiff's said application for patent, as shown by Finding 28 H, the following, which are shown by Exhibits, A, B, C, D, E, and F accompanying and forming a part of these findings of fact.

A reverse curve dike or breakwater in Wilmington Harbor, California, between Deadmans Island and Rattlesnake Island. Exhibit A.

Curved dikes or jetties at Senegal Bar, Africa. Exhibit B.

The Mansfield Jetty at Aransas Pass, Texas, shown by Exhibit C, and also by Exhibit D, in the latter of which it is noted as the "old government jetty," and the outer and curved portion of which was removed to prevent interference by it with the operation of the harbor company reverse curve jetty.

Curved dikes or jetties at Swinemunde Harbor, Germany. Exhibit E.

United States Patent No. 283683, to Thomas, August 21, 1883, for breakwater. Exhibit F.

XVIII.

From 1854 to the end of 1895, the channel at Aransas Pass drifted more than a mile from northeast to southwest, with diminishing depths as it progressed. The reverse curve jetty begun by the Aransas Pass Harbor Company in June, 1896, was completed by the United States in March, 1906, by the closing of a gap of about 1,600 feet in said jetty. Through this gap there was a flow and ebb of the tide. During said period from 1896 to 1906 the depth and width of the channel were variable and shifting. Alongside and near the jetty, in the curve concave to the current, there were frequently depths of more than 20 feet, occurring at irregular distances, and of varying widths, and too narrow for regular navigation. Since 1906 the depths have increased. In 1908 the ruling depth of the channel 100 feet wide was 6 feet.

Beginning in the year 1912, coastwise and seagoing vessels have been going through said pass, and in that year the Texas Railway Commission gave Aransas Pass the status of a commercial port, fixed railroad rates for it on the basis of water competition, and in so doing put it on a par with Galveston. Dredging was necessarily done in the years 1912 and 1915, inclusive, to maintain a proper navigable depth of channel in the pass.

XIX.

The evidence does not show to the satisfaction of the court that the so-called Haupt Jetty, which was constructed as aforesaid, did produce or would have produced a navigable channel of the necessary or proper depth and width for navigation purposes. The evidence shows that since the construction of the parallel jetty on the south and the dredging in the channel by the Government a navigable channel has been produced.

Conclusion of Law.

Upon the foregoing findings of fact the court decides, as a conclusion of law, that the evidence fails to establish a contract, either express or implied, between the plaintiff and the United States for the use of the plaintiff's said patented improvements, and that the court is therefore without jurisdiction of the claim. The plaintiff's petition is dismissed, with judgment in favor of the United States against the plaintiff for the cost of printing the record, in the sum of seven hundred and sixty dollars and thirty-nine cents (\$760.39), to be collected by the clerk as provided by law.

Opinion.

BROWN, *Judge*, delivered the opinion of the court.

The plaintiff, Lewis M. Haupt, a distinguished civil engineer, secured letters patent for certain improvements in dikes and breakwaters. The patent was granted April 3, 1888, and the letters patent numbered 380,569. This suit is for the recovery of compensation for the alleged use by the defendants of said patented devise in completing the improvement of Aransas Pass Harbor on the coast of the Gulf of Mexico, in Texas.

The facts disclose a jurisdictional issue, and while the findings are necessarily voluminous, the real development of the case, in so far as it happened, and the order of events is not open to much dispute. On March 22, 1890, the Aransas Pass Harbor Co. was duly incorporated under the laws of Texas. In May, 1890, Congress passed an act (26 Stat., 105) authorizing said company to construct within certain time limits a navigable channel in Aransas Pass Bay to result in the end in connecting the waters of the Gulf of Mexico and those of the Aransas Pass Bay and the Bay of Corpus Christi on the coast of Texas. The enterprise was a difficult one and the work to be done of vast public importance. The attempt under the first act of Congress resulted in a failure, *i. e.*, it was found impossible to meet the time limit set forth in the statute and this, together with other engineering difficulties, precluded the company from the benefits of the statute. On January 22, 1894, 28 Stat., 26, Congress passed a second statute wherein additional time was granted the company for the completion of the work and the rights of the company in the premises otherwise

recognized. The plaintiff herein proposed, after the passage of the act of January 22, 1894, to the harbor company the free use of his patented jetty. The license granted was upon the sole condition that the plaintiff himself was to supervise the work of construction and to receive, in conjunction with another engineer, the sum of \$1,000 when the work was successfully completed and the patented device demonstrated its worth. The company was to pay nothing for the use of the patent or the preparation of the plans and specifications. The company accepted the plaintiff's proposition with certain limitations. The plaintiff prepared the plans and drawings, submitted the same to the company, and it was found to involve too much expense to proceed in strict accord therewith. The company viewed the use of the patented jetty as more or less experimental and requested the plaintiff to modify his proposed plans of construction to meet its limit of financial outlay, which he did, resulting finally in the proposed construction of one-half of the patented jetty in order to determine its utility. In July, 1895, the Aransas Pass Harbor Co. contracted with Charles Clarke & Co., of Galveston, Tex., to construct the jetty in accord with the modified plans theretofore prepared by the plaintiff, and Clarke & Co. proceeded with the work until January 22, 1896. More than two years later, in May, 1898, the Congress

30 by proper legislation initiated the preliminary steps for taking over the improvement of the harbor by direct appropriations. On May 28, 1898, the Senate concurred in a resolution adopted by the House of Representatives authorizing the Secretary of War to prepare and submit plans and specifications for said improvement, together with estimates of cost necessary to complete the improvement of the harbor and secure the proposed inlet. A board was created by the Secretary in pursuance of said resolution and a detailed report followed covering extent, plan, and cost of the proposed work. The plaintiff in the meanwhile had called the attention of members of Congress to his patented jetty and urged its adoption, and while the report of the aforesaid board was pending before the House Committee on Rivers and Harbors, the plaintiff appeared in person before said committee and submitted an offer to complete the improvement of the harbor for \$700,000, a sum less than the estimate of the board. A sub-committee of the Rivers and Harbors Committee was appointed to consider the proposition submitted by the plaintiff and to this sub-committee the plaintiff again submitted his original bid, this time in writing, accompanied by a bond for the faithful performance of the work. The subcommittee declined to accept the plaintiff's proposition, expressing, however, a willingness to consider his proposed plan and their desire to give it a trial. To this end they recommended an appropriation for removing certain other improvements theretofore placed in the channel which interfered with the contemplated action of the plaintiff's patented jetty, and for the removal of which the plaintiff had submitted an estimated expense of \$50,000. On March 3, 1899, 30 Stat., 1128, Congress appropriated \$60,000 for dredging and improving

Aransas Pass Harbor. The Secretary of War, by the terms of this statute, was to expend said sum under certain specified conditions, one of which was for the removal of the so-called "Mansfield Jetty," and the other prohibited any expenditure until after the release and surrender of all rights and privileges theretofore acquired by the Aransas Pass Harbor Co. under previous acts of Congress. The harbor company executed the proper releases and conveyed to the United States all of its franchises and property rights whatsoever theretofore acquired by it. The plaintiff in writing notified the harbor company that his license to it for the free use of his patent was not transferable; he likewise notified Clarke & Co., as well as the committees of both the House and Senate in rivers and harbors. On June 13, 1902, Congress appropriated \$250,000 to continue the Aransas Pass improvements. This statute provided in terms for a continuation of the work under the plans adopted by the Aransas Pass Harbor Co. and for the removal of the "Mansfield Jetty." Previous to the passage of the foregoing enactment the plaintiff appeared before the House Committee on Rivers and Harbors and renewed his attempt to procure a contract for the completion of the harbor work. On this occasion his offer was reduced to \$500,000. The offer was declined by both the House and Senate committees. The Assistant Chief of Engineers of the Army was personally before the Senate committee and protested against awarding the contract for improvement to any private contractor, on the same occasion stating, "that if it was desirous of testing the Haupt patent he would be glad to give it a fair trial."

The plaintiff in proffering his bid for the work expressly stated in each instance that if awarded the contract no claim for 31 royalty for the use of his patented jetty would be made, and if not so awarded, he "would expect something for the work of development and the use of the patent." On April 20, 1903, the United States made a contract with Henry C. Ripley for construction work on said jetty. The plans, drawings and specifications followed by Ripley were first prepared by the Government engineer in charge of the work, after which they were submitted to the Aransas Pass Harbor Co. and by it to their consulting engineers, one of whom was the plaintiff himself. The plaintiff suggested amendments to the specifications which were adopted and brought the same within substantial compliance with his modified original plans and drawings. The plaintiff was personally interested in the Ripley contract; he furnished financial assistance to Ripley, and was to share in the profits of Ripley's contract.

Congress in 1905, 33 Stats., 1180, appropriated \$100,000 additional and authorized contracts to the extent of \$100,000 more for the continuation and completion of the project in accordance with the design and specifications of the Aransas Pass Harbor Co., and under contract with Clark & Co., pursuant thereto, the jetty was finally completed in March, 1906.

By the act of March 2, 1907, 34 Stats., 1091, Congress, upon the recommendation of a special board of engineers authorized by it, provided for changing the project into a twin-jetty project, which

was done by the War Department, as shown by Finding XVI, the change being made between March, 1908, and April, 1911, the Army engineers, under revised plans of the department, adding somewhat to the length of the south jetty in 1915.

Upon the first presentation of the case the court was under the impression that plaintiff's contention was predicated wholly upon the existence of an express contract, and relying upon that view of the case decided it accordingly. The case is now here on a motion for a new trial and to amend the findings, the plaintiff now insisting upon a decision respecting all features of the case; whether the same involves either express or an implied contract upon the part of the defendants to pay for the alleged use of the patented device. We believe that the plaintiff is clearly within his rights in so contending, and again enter upon a discussion of the case from every possible viewpoint going to the jurisdiction of the court to hear and determine the issues. In so far as any right to pay is alleged to flow from an express contract, we believe the issue clearly determinable adversely to plaintiff's contention. Whatever contract, if any at all, whether express or implied, must rest upon the plaintiff's representations to the committees of Congress and the subsequent expressions of that legislative body found in public statutes. Granting *arguendo* that a contract in any event could be implied under such a state of facts, then the court must gather from this particular Congressional record, and this record alone, the fact as to the meeting of the minds of the parties engaged in the transaction, supplemented of course by the pertinent transactions of the plaintiff with strangers to the present litigation, i. e., contractors engaged by the defendants to perform the work involving the alleged use of the patented jetty. In order to

32 bind the defendants the proof must directly connect them with the use of the patented device, and in such a positive way as to show a recognition of title in the plaintiff to the patent, and its use by them under such circumstances as to indicate an intention to pay for the same. *Berdan Fire Arms Co. v. United States*, 156 U. S., 552; *United States v. Societe Anonyme, etc.*, 221 U. S., 320.

The question of infringement is excluded from consideration because the cause of action arose prior to the passage of the act of 1910, 36 Stat., 851. The defendants had no direct connection with the organization of the Aransas Pass Harbor Co. This company was the outgrowth of long years of effort to unite by a navigable channel the waters of Aransas Pass Bay and the Gulf of Mexico. It was in a way a private enterprise to accomplish a great public service and afforded the plaintiff a most excellent opportunity to test the efficiency of his patented device. The harbor company accepted the plaintiff's license to use his patent and as modified by plaintiff proceeded to construct the jetty. Clarke & Co., subcontractors of the harbor company, continued to use the plaintiff's patent and up to the time when Congress intervened by legislation to take over and complete the work of construction by appropriation of public funds a considerable portion of plaintiff's alleged patented jetty had been constructed. Plaintiff's personal appearance before the committees of Congress was as much in the character of a contractor as a patentee

APPENDIX.

(See Model.)

2 Sheets—Sheet 2.

L. M. HAUPT
DIKE OR BREAKWATER

No. 380,569

Patented Apr. 3, 1888.

FIG. 1.



(No Model)

2 Sheets—Sheet 2

L. W. HAUPT
DIKE OR BREAKWATER

No. 380,569.

Patented Apr. 3, 1888.

FIG. 11.

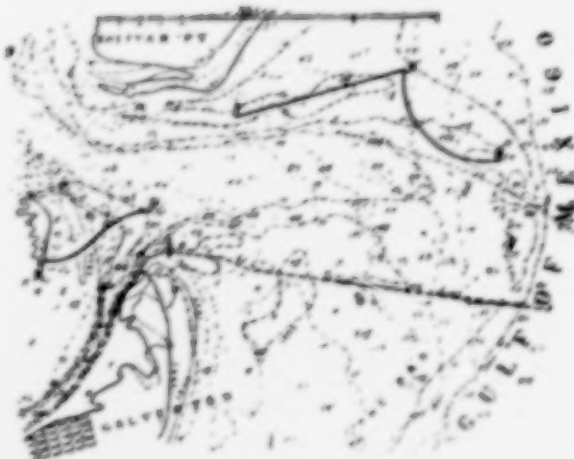
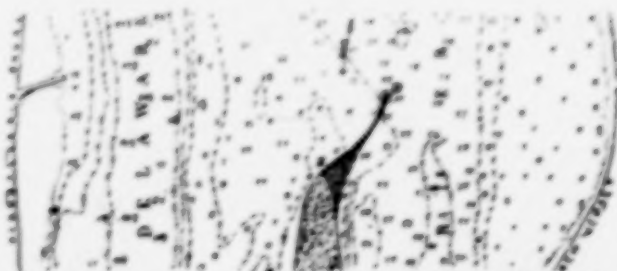


FIG. 12.



Witnessed
Richard
Orrick

Inventor
L. W. Haupt
J. A. H. H.

guage, and usually, if not uniformly, leaves the question of acceptance open as in cases of individual negotiation. The language of the acts is not left open to doubt, and the statute itself left free from ambiguity in this respect. Some recitation, some positive recognition of the subject matter of the contract appears and is set forth in such a clear and unmistakable way as to leave no doubt that Congress intends by the enactment of the statute to enter into a contract with respect to the very subject matter for which compensation can be claimed. It is unusual to predicate a suit upon inferences from the express language of a statute and necessarily involves the deduction of conclusions from a positive enactment always doubtful and depending for support upon the consideration of innumerable events outside of and totally disconnected from the usual procedure of legislative bodies. In this very case we find repeated appropriation acts authorizing the expenditure of vast sums of money in aid of navigation, appropriations to complete a work of great public importance involving the highest skill of engineers, a work carefully considered by Congress for a long term of years and no specific mention of plaintiff's device, no language from which the court may infer an intent to make a contract with an inventor to use a patent right, which admittedly they knew about, except the mandatory provision to proceed in accord with the plans adopted by the original parties who initiated the construction of dikes and jetties to perform the designed purposes. Why would Congress withhold appropriations from the plaintiff, and leave it doubtful as to his right to receive any portions of the vast sums set aside for this very purpose, if they intended to recognize his patent and pay him for its use? Congress had the matter before them, the plaintiff was there in person, every detail of the enterprise was before the committees, and it seems almost incredible that private rights, rights of extreme financial importance to the plaintiff, would be left for determination
34 by the courts when a simple appropriation would have cleared all doubt and covered all individual rights.

The defendants took up the work of construction where the company left it, and the appropriation acts import nothing more than an intention to avail themselves of the construction work theretofore performed by the failing company, an intent to prevent another effort *de novo*.

We have made the findings in detail. This course was the only one open to the court, notwithstanding the case must be dismissed for want of jurisdiction. The findings must show the completed transaction for a correct understanding of our conclusion.

The motions for a new trial and to amend the findings will be allowed in part and overruled in part, the former opinion will be withdrawn, and a new opinion filed dismissing the petition for want of jurisdiction. It is so ordered.

Hay, Judge; Downey, Judge; Barney, Judge, and Campbell, Chief Justice, concur.

(Here follow drawings marked pages 35 and 36.)

Lewis M. Haupt, of Philadelphia, Pennsylvania. Dike or break-water Specification forming part of Letters Patent No. 380,569, dated April 3, 1888. Application filed December 13, 1887. Serial No. 257,810. (No model.)

To all whom it may concern:

Be it known that I, Lewis M. Haupt, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Dikes and Breakwaters, which improvement is fully set forth in the following specification.

My invention consists in certain modifications in the form, position, and arrangement of dikes and breakwaters for improving the channels of rivers and harbors, whereby the efficiency of such structures is very greatly increased and their injurious effects largely avoided.

That the applications of my methods may be better understood it becomes necessary to state that the resources of the profession, as at present known and practiced, are limited for harbors to "dredging alone or the use of tidal scour between jetties, aided, if necessary, by dredging," and for rivers "by artificially dredging the shoal spots, or by increasing the power of the current at these points by contracting the channel or by concentrating a larger volume of water where they occur, so that by its scouring action the obstructions may be washed away." Hence mechanical dredging and scour produced by current concentration between jetties constitute the sum and substance of present methods. This concentration is usually effected by one or more dikes, wing-dams, or trailing walls resting upon one or both banks of a stream or harbor entrance, and so adjusted as to reduce the sectional area to such an extent as to produce the required velocity. For cutting a channel across the exterior bar at harbor-entrances the jetties are generally built in pairs and are made convergent, but the effect of such works is to contract the entrance, seriously to obstruct the ingress of the flood, and to render the navigation more difficult and dangerous.

The general principles involved in the work of river and harbor improvement, and which my methods are designed to employ, are—

First. If the bottom velocity of a stream be increased to the limit required by the character of the material forming its bed, it will scour; if diminished, it will deposit.

Second. If the momentum of a stream be suddenly arrested or changed in direction by an obstruction placed in its path, a reaction will be produced, its head will be increased, and the bottom will be scoured out. This is particularly observable under the concave banks of bends, where the deepest water is generally found.

Third. If the volume of a stream be partially deflected by a trailing wall from one side of a cross-over bar to the opposite side, the

current over the bar will be quickened and the crest will be lowered on the upstream side of the work.

38 Fourth. If the form of the cross-section of a stream be modified by cutting at one point and filling at another point of the same section, so that the area is not changed, (other things being equal,) the discharge will not be materially affected and the part so deepened will remain open.

Fifth. As a stream undergoes compression laterally in passing from a larger to a smaller section, the velocity of the portion near the banks will be increased relatively more rapidly than that at the center, and consequently the channel will frequently be bifurcated and the deeper water will be found nearer shore.

Sixth. In order that there may be a sufficient ebb-prism to produce a scour, the flood-tide should be freely admitted and the direction of the ebb-discharge be regulated and concentrated upon the weakest point of the bar, and not in the face of the flood.

Seventh. While the plane of tidal scour should be lowered, there should be no general disturbance of the entire body of the bar, which would otherwise reform when the velocity of the current becomes normal.

Eighth. The scouring force of a current is proportioned to the square of the velocity, while its transporting capacity varies as the sixth power.

Ninth. A jetty which causes an abrupt angular change in the direction of a current will produce injurious eddies and cause bars to be formed where they may become serious obstructions.

Tenth. The path of the ebb-stream in approaching and crossing the outer bar of harbors is along the line of least resistance, or at an angle of ninety degrees, or thereabout, to that of the flood resultant, where it is possible, and the deepest water is at the point where the flood action is the weakest.

The following observations will also be found of value in designing works for harbor and river improvements:

(a) The character, direction, and relative intensities of the forces acting upon any harbor-entrance may be determined with considerable accuracy from a study of the submerged topography and other local physical features.

(b) The form of the sandy spits adjacent to the entrance and the flood-tide channel lying under one of them and the ebb under the other will, in general, indicate the direction of the resultant movement.

(c) Harbor-bars are the results of the resistance offered by the shores to the momentum of the flood tide, and are composed almost entirely of beach sand and shingle.

(d) The flood and ebb forces are antagonistic, and the greatest effect of the one will be found where the energy of the other is least.

(e) The position of the entrance with reference to the general trend of the coast and eotidal lines will indicate generally the direction of the flood resultant and position of the ebb-channel.

In accordance with these principles and observations I have designed such forms of breakwaters and dikes and propose to place them in such positions as to produce the following results:

First. The operation of the natural forces in removing bars or preventing their formation is materially aided without serious interference with either the flood or ebb currents.

339 Second. By changing the directions of the confluent ebb-currents before reaching the gorge by interior dikes, this resultant is increased for more efficient scour on the outer bar.

Third. By utilizing the natural tendencies of the flood a beach-channel is cut under the nearer lip of the inlet, and this channel is deepened by compressing the flood into it by reaction wings.

Fourth. The advancing flood-wave is broken up by an obstruction designed to cause it to precipitate its load of sand on the outer slope of the bar, yet not to prevent the ingress of the flood-prism, while at the same time it also prevents the dissipation of the ebb through and over the weir or swash channels, and so increases its effective action on the bar.

Fifth. Better results are secured with a development of about one-third to one-half of that ordinarily required, as it is possible to dispense entirely with one jetty and part of another.

Sixth. The designs proposed also reduce greatly the risks to navigation and become aids instead of dangers, as is the case with many jetties, especially when submerged.

In harbors the proper form for a breakwater to secure these desiderata is one composed of a series of intersecting arcs having their cusps or salients so placed as to cut the advancing waves and resolve them into components along the concave faces of the structure, which is intended to extend above high water. By this means the opposing components in the same cove will neutralize each other and the transporting-power of the wave be destroyed, and shoals will form outside of the barrier, which will tend to reinforce it and establish its position. The form preferred would be that composed of one or more curves or semi-ellipses, with a semi-conjugate axis of about one-fourth the transverse, and at the shore end having a straight or slightly-curved flank extending inward toward the gorge, to produce a reaction and compression upon that part of the flood intended to scour out and maintain the beach-channel. The position would be on or near the crest of the outer bar, where it would defend the ebb-channel lying behind it and conserve the ebb forces for action upon the weakest part of the bar, while at the same time it will oppose and disin-

tegrate the flood without materially reducing the area of the section of ingress. The curves may be placed with their vertices opposite to each other, forming a double funnel-shaped passage, of the form of an hour-glass, through the gorge of which the tidal currents would be compressed with increased velocity.

In tidal rivers the form would be a reverse curve or ogee placed upon or near to the bar across which a channel is desired, and so adjusted as to produce a reaction of the impinging currents upon the bottom to create and maintain a channel. If the currents have not sufficient velocity to cut the channel, they may be aided mechanically by dredging out the cut in front of and filling behind the bulkhead with more durable material, so that merely the form of the cross section shall be changed, and not its area.

These improvements will be better understood by reference to the drawings.

Figure 1 represents a plan of the outer bar at the Charleston, South Carolina, entrance showing the form and position of the breakwater, and is selected because it is typical of a large class of similar phenomena. Fig. II represents a plan of the bar at Galveston, Texas, showing the position where the breakwater should be placed, and showing also a reaction-dike from Pelican Island. Fig. III represents a plan of reaction-dike at the upstream end of Petty's Island in the Delaware River, New Jersey.

Referring to Fig. I, the direction of the advancing flood resultant outside the bar and during the first and second quarters is shown at A. During the remaining half of the flood, and after the front of the wave has passed, it swings around to a direction nearly normal to the inlet. The flood-channel is seen in Maffit's channel under Sullivan's Island. The several swash-channels cross the bar at intervals, and the main ship-channel is at the point of the bar farthest removed from the entrance. The ebb thalweg lies nearly at right angles to the flood movement, and is in part defended by the submerged bar built by the flood. B B' B² are the groins of the proposed breakwater, built in the form of semi-ellipses, or any other curves which shall decompose and neutralize the flood energy. B' F is the reaction flank, intended to compress the flood in its passage through the shore or flood channel. U S J and u s j are the submerged jetties in process of construction at this entrance, and which are so placed as to attempt to force the ebb to discharge in the face of the flood, and which require a much greater length of development. C D and E G, Fig. I, represent an arrangement of curves with their vertices opposite each other, whereby the tidal currents are compressed and increased in velocity over the crest of the bar.

In Fig. II, B B' indicate the arc or curved portion of the breakwater, and B' F the reaction-flank. The breakwater is placed as in Fig. I, so as to decompose and neutralize the flood energy and compress the flood on its passage through the shore-channel. R D represent the reaction dike, in the form of a reverse curve, springing from Pelican Island, and co-operating with the breakwater by conserving the energy of the inner forces for ebb effects. The broken line U S J represents the position of the submerged Government jetties at this

point, the effect of which has been to move the bar bodily seaward, which effect it was desired to avoid. The drawing indicates the topography at two dates—to wit, 1850 and 1867—for the shore-line, illustrating the movement and showing the direction and extent of the erosion in these seventeen years. The outer bar (1883) shows the effect of the submerged jetty at this latter date.

In Fig. III is illustrated a reaction-dike, R D, at the upstream end of Petty's Island in the Delaware River. The form of the dike is a reverse curve, as shown, designed to withdraw a part of the ebb-discharge from the south and throw it into the north channel, and so scour off the lower extremity of Five Mile Bar and make a channel for navigation, thus securing by one short dike what has generally required one or two of considerably greater length. Moreover, the action is local and direct and the dike is a guide and aid to navigation, whereas in methods hitherto adopted the action is general and the position of the deeper water is not well defined. The direction of the ebb is indicated by the arrow.

I am aware that curved dikes have been proposed for such improvements; but they are not of such form as will secure the results required for a successful treatment of the forces they are designed to control, nor are they properly placed, and I do not claim any originality in a simple curve as applied to the plan of a dike or breakwater; but

What I do claim, and desire to secure by Letters Patent, is—

1. A breakwater or dike rising to or about the water-level, composed of a combination of curves so arranged as to resist and decompose the flood resultant over a portion of the outer bar, and at the same time to permit the free ingress of the tidal prism to the inner basin, substantially as described.

2. A breakwater rising to or about the water-level and composed of a combination of curves and right lines so arranged as to resist and decompose the flood resultant over a portion of the outer bar, and at the same time to permit the free ingress of the tidal prism to the inner basin, substantially as described.

3. The breakwater herein described, rising to or about high water and consisting of a concave curved portion and a flank angularly approaching but disconnected from the shore, to produce a reaction and compression upon that part of the flood intended to scour out and maintain the beach-channel, substantially as set forth.

4. A breakwater rising to or about high-water level and comprising one or more curves having their cusps or salients placed so as to cut the advancing waves and resolve them into components along the concave faces of the structure, substantially as described.

5. A breakwater rising to or about high-water level and for improving the channels of rivers and harbors, said breakwater consisting of one or more semi-ellipses having at the shore end a straight or approximately-straight flank, substantially as described.

6. A dike for improving channels, said dike being composed of curves concave toward the current so disposed as to withdraw a part of the current from one channel and divert it into another, substantially as described.

7. A reaction-dike in tidal waters, composed of curves concave toward the current and disconnected from the main shore-lines, and so disposed as to divert part of the current force from one channel into another, substantially as described.

8. The combination of the breakwater composed of a series of intersecting arcs and a straight or slightly-curved flank, and the dike composed of compound or reverse curves for conserving the energy of the inner forces, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

LEWIS M. HAUPT.

Witnesses:

ROBERT W. DAVIS,

CHARLES W. SPARHAWK

42

VII. *Judgment of the Court.*

At a Court of Claims held in the City of Washington on the Seventeenth day of June, A. D., 1918, judgment was ordered to be entered as follows:

The Court, upon due consideration of the premises find in favor of the defendants, and do order, adjudge and decree that Lewis M. Haupt, as aforesaid, is not entitled to recover and shall not have and recover any sum in this action of and from the United States; and that the petition be and it hereby is dismissed; And it is further ordered, adjudged and decreed that the United States shall have and recover of and from Lewis M. Haupt, as aforesaid, the sum of Seven Hundred and Sixty Dollars and thirty-nine cents (\$760.39), the cost of printing the record in this case in this court, to be collected by the Clerk, as provided by law.

By THE COURT.

VIII. *Proceedings After Entry of Judgment.*

On October 28, 1918 the claimant filed in open court, nunc pro tunc as of August 15, 1918, a motion for amendment of substituted findings of fact. This motion was overruled by the court on December 16, 1918.

On February 14, 1919 the claimant presented for filing a motion for leave to file a second motion to amend findings. This motion was overruled by the court February 24, 1919, and the following order entered:

IX. *Order of Court Entered February 24, 1919.*

This case was orally and elaborately argued and was submitted together with briefs and requests for findings of fact on May 22, 1917.

On June 14, 1917, the court filed its findings of fact and entered an order dismissing the petition, with an opinion.

On August 13, 1917, claimant filed a motion for a new trial and for amendment of findings. Subsequently on October 15 the claimant was allowed to amend said motion for a new trial and amendment of findings after the defendants had filed a motion to strike the same.

On October 26, 1917, the claimant filed a motion for an extension of time to file a brief on his motion for new trial, and on November 19, 1917, the case was remanded by the court to the Law Calendar on motions of the parties for a new trial and to amend findings.

The case came on for hearing on April 2, 1918, when the motions were orally and elaborately argued, and the case was again submitted.

On June 17, 1918, the motions to amend were allowed in part and overruled in part; amended findings by the court were filed together with an opinion, and the petition was dismissed.

On October 28, 1918, claimant filed a motion for an amendment of the findings of fact, and this motion was on December 16, 1918, after full consideration, overruled.

Claimant's motion for leave to file second motion to amend findings is overruled.

BY THE COURT.

44 X. *Claimant's Application for, and Allowance of, an Appeal.*

Claimant hereby prays an appeal to the United States Supreme Court from a judgment of this court rendered on the 16th day of December, 1918, reaffirming a judgment rendered on the 17th day of June, 1918, by which the petition was dismissed.

BENJ. CARTER,
Attorney for Claimant.

Filed March 3, 1919.

Ordered:

That the above appeal be allowed as prayed for.

BY THE COURT.

March 3, 1919.

45

Court of Claims,

No. 30379,

LEWIS M. HAUPT

vs.

THE UNITED STATES.

I, Sam'l A. Putman, Chief Clerk Court of Claims, certify that the foregoing are true transcripts of the pleadings in the above-entitled cause; of the argument and submission of case; of the findings of fact (and of the Exhibits therein referred to and made part thereof); of the conclusion of law and the opinion of the court by Booth, J.; of the judgment of the court; of the claimant's application for, and allowance of, an appeal to the Supreme Court of the United States.

In testimony whereof I have hereunto set my hand and affixed the seal of said Court at Washington City this Twentieth day of March, A. D., 1919.

[Seal Court of Claims.]

SAM'L A. PUTMAN,

Chief Clerk, Court of Claims.

Endorsed on cover: File No. 27,032. Court of Claims. Term No. 336. Lewis M. Haupt, appellant, vs. The United States. Filed March 29th, 1919. File No. 27,032.

(894)

APR 19 1930

JAMES D. MAHER,
CLERK.

IN THE
Supreme Court of the United States.

OCTOBER TERM, 1919.

No. **85**

LEWIS M. HAUPT
v.
THE UNITED STATES.

MOTION OF CLAIMANT FOR REMAND TO
THE COURT OF CLAIMS FOR ADDI-
TIONAL FINDINGS OF FACT.

BENJAMIN CARTER,
Attorney for Claimant.

GEORGE RAMSEY,
Of Counsel.

IN THE
Supreme Court of the United States.

OCTOBER TERM, 1919.

No. 338.

LEWIS M. HAUPT
v.
THE UNITED STATES.

**MOTION OF CLAIMANT FOR REMAND TO
THE COURT OF CLAIMS FOR ADDI-
TIONAL FINDINGS OF FACT.**

Appellant, deeming that the findings of fact made by the Court of claims, contained in the record of this case, are not sufficient in their scope for true determination of the controlling facts, moves that the case be remanded to the Court of Claims with directions to make findings on the following points of fact:

I. Whether, when considering appellant's proposals for the continued use, in the improvement of Aransas Pass harbor, of his ideas and design, and deciding to avail of said ideas and design but to commit the work to the Corps of Engineers, as recited in paragraph IX of the findings of fact (Record, page 19) the Senate committee in any way expressed an intention or expectation

that no compensation would be paid to appellant by the Government, and whether the House committee and the Senate committee understood that, in the event of the use of his ideas and design in any other way than by contracting with him for the construction, he would expect such compensation.

2. Whether the two-jetty system, as employed by the army engineers in harbor improvements, assumed and provided for periodical dredging of the channel by artificial means.

3. On which side of the channel—that next the curved jetty or the opposite side—and at what longitudinal point or points of or in relation to the jetties, was the artificial dredging done in and after the year 1912, to which paragraph XVIII of the findings (Rec., p. 23) refers, and for what particular purposes was it done.

4. Whether before 1908 any dredging, except for removal of the artificial obstructions described in paragraphs III, VI, and X of the findings (Rec., pp. 12, 16, 20), was done to aid the development of the Aransas Pass channel, and at what time was blasting or dredging done toward removing from the channel such remains of the "Mansfield" jetty as had been left in 1906 at the conclusion of Moore & Sieber's work recited in paragraph X of the findings (Rec., p. 20).

5. Whether in the actual construction done in 1907 to 1915 upon the designs of the army engineers, as recited in paragraph XIV of the findings (Rec., p. 21), any change was made in the curved jetty already constructed.

6. Whether the purpose of the breakwater in the Wilmington, California, harbor, mentioned in paragraph XVII of the findings (Rec., p. 23), was to develop a channel or to close a gap between two islands.

7. Whether (a) the design for the Swinnemunde, Germany, harbor improvement and (b) the study for the improvement of the Senegal River, Africa, mentioned in said paragraph XVII, included a single jetty or two jetties; and whether in each case the jetty-construction was planned to be on a reverse curve or a simple curve; also, in each case, whether the site of the proposed improvement was in a sea-shore harbor or a flowing river.

8. Whether the "Mansfield" jetty included one curve or two and, if only one curve, what sort of a line was the remaining part of the jetty, if any, to follow.

9. Whether the letters patent of E. O. C. Thomas mentioned in said paragraph XVII specified a reverse curve as a feature of the breakwater proposed and whether the purpose of the design so patented was (a) to scour a channel or (b) to neutralize the destructive force of waves.

10. What width of navigable channel, sixteen feet or more deep (though including spots where the depths was not more than six feet), was there at Aransas Pass in 1908, the time named in paragraph XVIII of findings (Rec., p. 23); also whether the channel thereafter continued to improve.

Appellant moves, further, that the Court of Claims be directed (a) to set out in the findings the text of the clause, referred to in paragraph X (Rec., p. 19) in the contract of Henry C. Ripley by which he agreed to indemnify the United States against any claim for the use of any patented invention and (b) to find whether that was a customary stipulation in contracts let by the Corps of Engineers for harbor or river improvements or other construction.

This motion will be understood better if considered in connection with the briefs and oral argument on the ap-

peal proper, and appellant therefore requests that hearing of the motion be postponed until the argument.

Copies of the main brief for appellant were furnished to the Solicitor General on March 23rd, 1920, and notice was given therein of this motion and of the purpose to ask that it receive attention from the court at the hearing.

BRIEF.

In the opening statement of the main brief filed for appellant the professional activities of appellant in his early years, before he had achieved national and international fame, and the development of his jetty-design (the first-cause of this suit) are sketched. The central facts are these: During long years of study and practical experience in hydrography and in hydraulic engineering appellant had kept firmly in mind the ideas that a current of water, by action upon and reaction from a concave bank of firm material, digs remorselessly into a bottom of softer material so as to create a channel in a zone parallel to that bank; that the material so excavated, and disintegrated in that process, is thrown off transversely to the bank; and that in the ocean, where there is a limitless expanse of water, this detritus, if the bank lies at the proper angle to the coastwise currents and no other bank of any kind intervenes, will be floated away by those currents and disappear. Naturally he was impressed that great natural forces were lost and large waste of money incurred, in the development of a channel, when two banks (or jetties), on practically parallel lines were constructed and reliance was had on artificial dredging to clear away a bar that constantly formed at the outer extremity of these walls. On this

latter plan, with immaterial variants here and there, our army engineers had made and were continuing to make their improvements. No application had been made anywhere, so far as appellant knew, of the principles to which he was giving thought. Being employed some years in the Patent Office he made investigation and could not find any record of an invention or thesis on those lines; yet he was convinced that to create a channel of the necessary depth and width and to expell to a sufficient distance the dissolved silt was a question purely of determining (in relation to the volume and strength of the natural currents and the other physical incidents of the perculiar channel to be improved) the position, direction, size, materials, cross-sectional construction, etc., for a curved breakwater, with or without connecting walls, to give proper direction to the outward current.

When Mr. Haupt's ideas were patented and published they naturally challenged attention of engineers, scientists, and leaders of industry generally. The design was laid before the American Philosophical Society, one of the most renowned organizations of that character in this country, under a *nom de plume*, and after nine months' examination by engineers and hydrographers such a report was made that the society unanimously voted to appellant its Magellanic premium and medal for his "invention and discovery in physical hydrography and its application to the improvements of harbors;" this being the fifth occasion, in the society's life of more than a century when it had awarded such a premium (Proceedings of this society, 1887, vol. 21, p. 446). Year by year the design was discussed at the meetings of the Society of American Engineers upon theory and upon results accomplished by projects, on no great scale, which had been constructed under Mr. Haupt's direction. Circum-

stances combined to mark out Aransas Pass, Texas, for a demonstration of the design's efficiency in developing a channel in tide water. A plan of the army engineers for development of that harbor having failed, a private corporation, with rather scant financial resources, had taken up the work. The physical conditions were favorable for economical application of the plan. The channel at its inner end lay between St. Joseph's Island on the north and Mustang Island on the south, and the rivetted north shore of Mustang Island, slightly concave to the channel, sufficed to create a current which, properly controlled, would effect the desired scour further out. The problem then was to place a breakwater on the north side of, and also concave to the channel and scientifically to adjust its length, degrees of curvature, shape, etc., so as to bring about a sufficient erosion of the soft material at the bottom and throw it off, down the shore, beyond the desired ^{width} length of the channel. Mr. Haupt, already familiar with that harbor by reason of a study of the whole Texas coast which he had made during his Corps of Engineer service, now made a close study of all the local conditions and submitted to the engineers of the Aransas Pass Harbor Company a design for a jetty which in his judgment would do the work rapidly; but this was a rather more ambitious project than the company could shoulder and Mr. Haupt, therefore recast it, reducing the length of the jetty about a half. The company adopted this revised plan and proceeded with its execution. Mr. Haupt waived all claims to a royalty from the company but received a small honorarium for serving as a consulting engineer during the construction. This construction commenced in 1895; but unexpectedly the old Government jetty was discovered, crossing the channel, and the company's other difficulties were such

that by 1897 it was content to cede back to the Government the right which it had received and to look to Congress for completion of the improvement. Appropriate legislation of Congress followed and finally in 1899, as a condition to an appropriation of \$60,000.00 for removing the outer portion of the old Government jetty, the company executed a deed conveying to the Government its franchise and properties. Before this conveyance was made Mr. Haupt, in writing, advised both the company and the proper committees of Congress that the license which he had given for the use of his design was limited to the company and could not be transferred without arrangement with him. Mr. Haupt was invited and appeared before the proper committees of the 57th Congress and explained the design on which the jetty had been laid out and the evidences of its effects, so far as constructed, and he made propositions, first to the House Committee on Rivers and Harbors and then to the Senate Committee on Commerce, for the completion of the jetty by himself for lump-sum compensation, and he agreed, in that event, to waive all claims to royalty. The Acting Chief of Engineers was present at the hearing before the Senate committee, and, finding the committee disposed to utilize Mr. Haupt's ideas, suggested that nevertheless the execution of the work be entrusted to his Corps. The committee consented to this and provided an appropriation to be utilized by the Corps; but it prescribed that the construction be confined "to the completion of the north jetty in accordance with the design and specifications of the Aransas Pass Harbor Company, and in continuation of the work heretofore carried out on said jetty by said company, and to such additional work as may be necessary for strengthening the jetty." In those terms the

act was passed (approved June 13, 1902), appropriating \$250,000. By this and two successive appropriations, of \$100,000 each, by acts of March 3, 1905, and June 30, 1906, in identically the same terms, the jetty was completed; a contract being let under the first appropriation to Henry C. Ripley and two contracts being let to Clark & Co. The work of Clark & Co., was the completion of some 1,600 feet in the middle of the jetty, a large part of which had never been brought above low water. (32 Stats. Ch. 1079, p. 340; 33 Stats. Ch. 1482, p. 1130; 34 Stats. Ch. 3914, p. 737).

This jetty was completed in June, 1906; and from that time on there was a continuous development of the channel; but under plans of the army engineers adopted by Congress in 1907 and 1914 other works were constructed which were not included in and were harmonious with the Haupt design. These consisted of another jetty south of and parallel with the axis of the Haupt jetty, and a wall connecting the Haupt jetty with St. Joseph's Island.

By 1912 such a channel had been developed and such trade created by means thereof that the Texas Railway Commission rated Aransas Pass as a commercial port, putting it on a par with Galveston as to transportation rates. After the completion of the south jetty in 1912, as planned in 1907, recourse was had to dredging for maintenance of the channel. The plan of 1907 had assumed that such dredging would be necessary from the beginning at a cost of \$60,000 per annum, and the annual appropriations which followed carried for each year that identical item, but these moneys were not used until in 1912. During the years 1912, 1913, 1914 and 1915, dredging was done at a direct expense to the Government of over \$120,000 in addition to \$100,000, part cost of a new dredge.

(House Document No. 639, 61st Congress, 2nd session. Reports of Chief of Engineers: 1912, pp. 720, 2027; 1913, pp. 801, 2272; 1914, pp. 835, 2323, 2324; 1915, pp. 919, 2658.)

The above-recited facts appear in the findings of the Court of Claims or in publications of which this court is deemed to have judicial knowledge. It is apprehended, however, that they may not quite suffice for determination of the vital issues; and what this motion seeks is an opportunity to have the findings expanded to include any details which this court, upon hearing argument of the appeal, may regard as important. The motion assumes that the facts inquired of are already established by the deposition proof at the Court of Claims or public documents.

These details of fact naturally fall under several heads:

Authoritative adoption of claimant's design and ideas —Question 1.

Whether the questions of the adoption by Congress of appellant's patented design and of its assumption that he would be paid what his invention, with his ideas for the application of the same at Aransas Pass, were worth, are jurisdictional, as considered by the Court of Claims, does not seem to be important, since upon these issues alone the petition was considered and dismissed. The findings would seem to be ample unless this court should say no presumption is to be indulged that Congress understood appellant as expecting compensation if the design were used in any other way than by direct contracting with him for completion of the jetty-construction. But the Court of Claims had before it the testimony of a Senator who at the time in question was a member,

and now is Chairman of the Senate Committee on Commerce and of two other Senators, when examined, one of ^{Mr. Haupt} had been chairman and another a member of the House Committee on Rivers and Harbors at that time; and if it be desirable to have the Court of Claims say, to one effect or another, what was the understanding on which the committees considered the question of using the Haupt plan without giving Mr. Haupt the contract, the fact should be easily determinable from that evidence.

Saving by Haupt jetty of dredging—Questions 2, 3, 4 and 5.

As is said in the main brief filed for appellant (pp. 24, 25), the saving of expense by the Haupt jetty, as against the plans of the army engineers and the appropriations of Congress of 1907 and the years following, is one, distinct measure for compensation to Mr. Haupt. Upon the main points that artificial dredging is an incident of twin jetties, that the money had been provided for such dredging at Aransas Pass while the Haupt jetty alone was functioning, and that no considerable dredging was done there until after a second jetty had been constructed, inquiry need not go beyond the findings of the Court of Claims and the reports of the Chief of Engineers; but, as appellant is advised, this whole matter will be clearer if this court were told the exact *loci* in the channel area, and the purposes, of some little dredging that was done during the construction, firstly of the Haupt, or north jetty, and subsequently of the south, or "Government" jetty. If it should appear that there were deposits, calling for artificial dredging, which were chargeable to the Haupt jetty, the fact might be deemed pertinent in connection with the expense of the dredging

done in and after 1912. If, *per contra*, the purpose of this sporadic dredging was to remove the remains of the old Government jetty, and that obstacle had reduced the efficiency of the Haupt jetty, these facts not only may be pertinent but may solve all doubts on the question whether the Haupt jetty, *f. e.* of any countervailing structures, would automatically have cleared and maintained a commercial channel and saved the Government all cost of artificial dredging.

Novelty of appellant's patent—Questions 6, 7, 8 and 9.

If appellant's claim against the Government should turn upon the validity of his patent, then one sub-issue is the patent's novelty; and it is submitted that the meager findings of the Court of Claims regarding supposed "disclosures of the prior art" (findings XVII, Rec., p. 23) are not sufficient to determine whether appellant's ideas were in reality anticipated. Inquiries are now suggested, therefore, respecting the intended functions of one structure and one paper patent cited and the structural elements of two other theoretical projects.

Width of navigable channel created by Haupt jetty alone—Question 10.

While the matter may not be important, this court may prefer to know a little more than is stated in finding XVIII (Rec., p. 23) with respect to the character of channel that was developed, after the completion of the Haupt channel and before any considerable work had been done on the south jetty. Pertinent questions then will be: (a) what navigable width was there in this channel, and, (b) whether the improvement was continuous.

Alternative measures of appellant's compensation.

The Court of Claims, for the reason that it could not say whether the Haupt jetty alone or the enlarged improvement, of which it is a part, caused the development of the commercial channel, refrained from finding any sum as reasonable compensation to claimant or dealing in any way with the measure thereof. According to appellant's view, there is sufficient evidence in the record and the engineering reports for computation of a judgment on more than one basis. This evidence includes, beside the necessary figures, the opinions of experts which have been received, according to the custom of the Court of Claims, regarding the proper measure of the recovery. Should the case be remanded, and should this court be impressed that something more is due to appellant than the mere saving for dredging during the years prior to 1913, convenience of the parties would be advanced by the court's designation of the proper heads on which findings shall be made in this connection.

If the Government, for the reason that the operations of the Haupt jetty are blended inextricably with the operations of the enlarged project, is legally bound to appellant for the entire results so accomplished, it would not be unreasonable to allow to appellant the difference between the cost (a) of the entire improvement and (b) of the Haupt jetty alone. This would seem but another way of saying as matter of law that the Haupt jetty was the sole agent in creating the channel and so relieved the Government from all real need of such expenditures as afterward were made.

Again there might reasonably be considered the cost of producing the channel in question, say, to the end of the year 1907, in comparison with the expense of similar

projects at other ports. For this comparison the harbor entrances at Galveston and Sabine Pass, Texas, Pensacola and St. Johns River, Florida, and Charleston, Cumberland Island and Winyah Bay, South Carolina, are suggested, with consent that any others may be added which Government counsel may regard as significant.

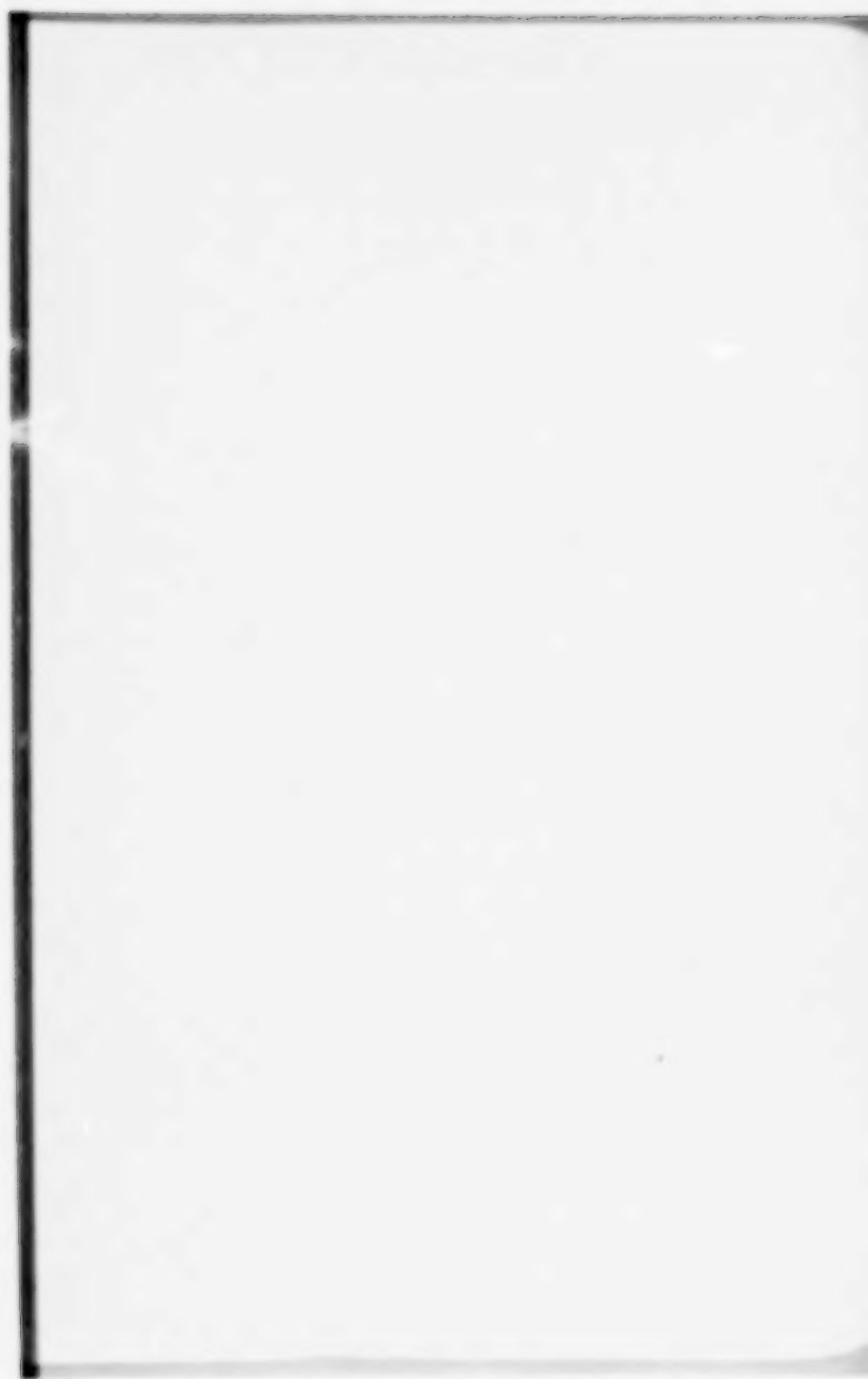
Another method of accounting proposed by the witnesses is the capitalizing of the expense saved. For example, \$60,000 a year saved by the omission of dredging alone is the equivalent, at five per cent per annum, to an investment of \$1,500,000, and \$220,000 which was actually expended for dredging in the years 1912 to 1914, inclusive (which means \$44,000 per annum) is the equivalent, at the same rate, of \$880,000 invested.

The subjects of this last sub-head are not included in this motion. The matters set up in the motion were presented to the Court of Claims by a motion, in the proper course, for amendment of its substituted findings.

BENJAMIN CARTER,

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GEORGE RAMSEY,
Of Counsel.



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PAUL A. BAKER,
CLERK.

IN THE

Supreme Court of the United States

OCTOBER TERM, 1920.

No. 336. 85

LEWIS M. HAUPT

vs.

THE UNITED STATES.

Motion of Appellant to Amend Motion For Remand to Court of Claims.

Appellant by his attorney shows to the court that there is now before the court a motion filed by him for a remand of the case to the Court of Claims in order that findings may be made on divers inquiries of fact stated therein; and he now by leave of court amends said motion by adding, for such findings, the following inquiries:

(11) Did the single-jetty design originally prepared by appellant for use by the Aransas Pass Harbor Company consist of a single curve or of a succession of two curves, reverse to each other, and, if two curves, what was the relative situation thereof to each other and to the shore and what was the length of each curve as so designed?

(12) As reformed for present use by said company what were the component parts of the design and what was the designed length of each part and its situation in relation to the other parts and to the shore?

(13) At what places on said reformed design was the work of Clark & Co., referred to in paragraph V of the

finding of fact, done and what work was accomplished by them at each place?

(14) In the specifications prepared in 1902 under advice of appellant for the work to be done by Henry C. Ripley what were the changes made from the specification on which the work of the Aransas Pass Harbor Company had been done and did such changes affect the lines or directions of the jetty proper, or of any part thereof?

BENJ. CARTER,

Attorney for Appellant.